

3. (Amended) A processor having a plethysmograph waveform input resulting from light attenuated by body tissue with pulsing blood and a pulse recognition output providing information regarding pulses within said waveform input, said processor comprising:

a candidate pulse portion that determines a plurality of potential pulses within said waveform input; and

a physiological model portion that determines the physiologically acceptable ones of said pulses, wherein said physiological model portion comprises a component that disregards ones of said potential pulses that are generally asymmetric.

4. (Amended) A processor having a plethysmograph waveform input resulting from light attenuated by body tissue with pulsing blood and a pulse recognition output providing information regarding pulses within said waveform input, said processor comprising:

a candidate pulse portion that determines a plurality of potential pulses within said waveform input; and

a physiological model portion that determines the physiologically acceptable ones of said pulses, wherein said physiological model portion comprises a component that disregards ones of said potential pulses that have a descending trend that is generally slower than a subsequent ascending trend.

5. (Amended) A processor having a plethysmograph waveform input resulting from light attenuated by body tissue with pulsing blood and a pulse recognition output providing information regarding pulses within said waveform input, said processor comprising:

a candidate pulse portion that determines a plurality of potential pulses within said waveform input; and

a physiological model portion that determines the physiologically acceptable ones of said pulses, wherein said physiological model portion comprises a component that disregards ones of said potential pulses having a signal strength that differs from a short-term average signal strength by greater than a predetermined amount.

6 1<sup>st</sup>. (Twice Amended) A method of recognizing pulses within a plethysmograph waveform resulting from light attenuated by body tissue with pulsing blood comprising the steps of:

identifying a plurality of potential pulses in said waveform;  
comparing said potential pulses to a physiological pulse model to derive at least one physiologically acceptable pulse; and  
generating statistics for said at least one acceptable pulse.

#### REMARKS

The February 13, 2002 Office Action was based upon pending Claims 1-3 and 5-17. By this Amendment, Applicant amends Claims 2, 8, 9, 11 and 13 and cancels Claims 1, 5-7, 10, 12 and 15. Thus, after entry of this Amendment, Claims 2, 3, 8, 9, 11, 13, 14, 16 and 17 are pending and presented for further consideration. In view of the amendments and the following comments, Applicant respectfully submits that Claims 2, 3, 8, 9, 11, 13, 14, 16 and 17 are patentably distinguished over the cited references and respectfully requests the Examiner to pass Claims 2, 3, 8, 9, 11, 13, 14, 16 and 17 to allowance.

#### Allowable subject matter

In the February 13, 2002 Office Action, the Examiner allowed Claims 16 and 17.

Further, the Examiner objected to Claims 2, 3, 8, 9, 11, 13 and 14 as being dependent upon a rejected base claim. However, the Examiner indicated that Claims 2, 3, 8, 9, 11, 13 and 14 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2, 8, 9 and 11 depended from Claim 1, and have been rewritten as independent claims. In Claim 9, the informality has been corrected. Claim 3 depends from Claim 2 as amended. Therefore, in view of the Examiner's statement of allowability, Claims 2, 3, 8, 9 and 11 are allowable over the cited references.

Claim 13 depended from Claim 12, and has been rewritten as independent claim. Claim 14 depends from Claim 13 as amended. Therefore, in view of the Examiner's statement of allowability, Claims 13 and 14 are allowable over the cited references.

Applicant respectfully requests allowance of Claims 2, 3, 8, 9, 11, 13 and 14.